

## SAFETY DATA SHEET

### SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product Identifier : **Armstrong S-289 Pressure Sensitive Flooring Adhesive**  
 Product Code : 70013123  
 Trade Name/Synonyms : S-289  
 Recommended Use : Adhesive for installing commercial carpet, cushion and cushion-backed residential flooring  
 Uses Advised Against : No information available.  
**Supplier's name and address:**  
 Armstrong Flooring, Inc.  
 2500 Columbia Ave.  
 Lancaster, PA, USA 17603

Information Telephone No. : (800) 233-3823  
 Website Address : <http://www.floorexpert.com>  
 24 Hr Emergency Telephone # : CHEM-TEL: 1-800 255-3924 or +01-813-248-0585 (call collect)

### SECTION 2 – HAZARDS IDENTIFICATION

**GHS Classification per 29 CFR 1910.1200 (OSHA HCS 2012) and HPR (WHMIS 2015)**  
 Not classified as hazardous

**GHS Pictograms** : None.

**Signal Word** : None.

**Hazard Statements** : None.

**Safe Handling Instructions:** Avoid eye and skin contact. It is recommended to use safety glasses and gloves during handling. During installation process, adequate ventilation of the work area should be maintained. Although the adhesive is low VOC, persons who are sensitive to odors or chemicals should avoid the work area during installation. Keep container closed.

**Hazards Not Otherwise Classified** : None.

**% With Unknown Acute Toxicity** : Less than 1% by weight of this product is comprised of ingredients with unknown acute toxicity.

### SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (by weight)
No hazardous ingredients	N/Ap	100

### SECTION 4 – FIRST AID MEASURES

**General** : Call a doctor if you feel unwell.

**Inhalation** : If a worker develops breathing problems while working with this material, remove the worker to fresh air and keep at rest in a position comfortable for breathing.

**Skin contact** : Wash with plenty of soap and water. If irritations or symptoms develop, seek medical attention/advice.

**Eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

**Ingestion** : Rinse mouth. Do NOT induce vomiting. Call a doctor/physician if you feel unwell.

**Notes for Physician** : Treat symptomatically.

**Signs and symptoms of short-term (acute) exposure**

- Inhalation* : None known.
- Skin* : Symptoms may include mild redness or itching.
- Eyes* : Symptoms may include mild redness, itching, or pain.
- Ingestion* : None known.

**Effects of long-term (chronic) exposure**

- : None known.

**Indication of need for immediate medical attention or special treatment**

- : Difficulty breathing persists after removing the person to fresh air.
- Any exposure to the eye which causes irritation.

**SECTION 5 – FIRE FIGHTING MEASURES**

**Suitable extinguishing media** : Carbon dioxide, dry chemical powder, alcohol foam or water spray.

**Unsuitable extinguishing media** : Water jet may spread the burning material.

**Hazardous combustion products** : Carbon monoxide, carbon dioxide, as well as other toxic vapors and gases which are common to thermal degradation of organic compounds.

**Special fire-fighting procedures/equipment**

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes.

**Environmental precautions** : Do not allow material to enter drains or contaminate ground water system.

**Fire hazards/conditions of flammability**

- : Not flammable under normal conditions of use. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

**Flammability classification (OSHA 29 CFR 1910.1200, WHMIS 2015)**

- : Not flammable.

NFPA Rating

- : 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe

*Health: 1 Flammability 1 Instability 0 Special Hazards: None*

**SECTION 6 – ACCIDENTAL RELEASE MEASURES**

**Personal precautions** : Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate chemically protective equipment.

**Protective equipment** : Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

**Emergency Procedures** : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).

US CERCLA Reportable quantity (RQ): None reported.

**Methods and materials for containment and cleaning up**

- : Ventilate area of release. Stop spill or leak at source if safely possible. Contain product with inert absorbent material, preventing it from entering sewer lines or waterways. Gather up spilled material and place in suitable container for later disposal (see Section 13). Residual of product, while still wet, can be cleaned up with warm soapy water. Notify the appropriate authorities as required.

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- Prohibited materials** : None known.
- Environmental precautions** : Do not allow product to enter drains or waterways. Do not allow material to contaminate ground water system.
- Reference to other sections** : See Section 14 for disposal information.

## SECTION 7 – HANDLING AND STORAGE

- Safe handling procedures** : Wear suitable protective equipment during handling. (See Section 8.) Observe good hygiene standards. Use only with adequate ventilation. Wash thoroughly after handling. Avoid contact with eyes, skin, or clothing. When removing this product from existing flooring (i.e. during a renovation), wear safety goggles and respiratory protection from dust due to blasting, chipping, or mechanically pulverizing. Keep container tightly closed.
- Storage requirements** : Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.
- Incompatible materials** : See Section 10.
- Special packaging materials** : Always keep in containers made of the same materials as the supply container.

## SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Permissible Exposure Limits** : No exposure limits have been established for the product itself. Below are exposure limits for the components in the product.

Ingredients	CAS #	ACGIH TLV		OSHA PEL	
		TWA	STEL	PEL	STEL
No hazardous ingredients	N/Ap	N/Ap	N/Ap	N/Ap	N/Ap

- Engineering Controls** : Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Ventilation should effectively remove and prevent buildup of any vapor generated from the handling of this product.
- Personal Protection Equipment**
  - Eye / face protection** : Chemical goggles or safety glasses, as appropriate for the job.
  - Skin protection** : Wear gloves which are impervious to the material. Materials such as nitrile rubber or Viton (fluorocarbon rubber) are recommended.
  - Body protection** : Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.
  - Respiratory protection** : Under normal conditions of use with adequate ventilation, respiratory protection should not be necessary. If work process generates excessive quantities of vapor or dust, or exposures in excess of any PEL, wear an appropriate organic vapor respirator.
- Site safety equipment** : An eyewash station and safety shower should be made available in the immediate working area.
- General hygiene considerations** : Avoid contact with eyes, skin and clothing. Avoid breathing vapors/dust. Do not eat, drink or smoke when using this product. Upon completion of work, wash hands thoroughly. Remove soiled clothing and wash it thoroughly before reuse. Clean all equipment and clothing at end of each work shift.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- |                               |                 |  |               |
|-------------------------------|-----------------|--|---------------|
| <b>Physical state</b>         | : Paste         | <b>Appearance</b>                            | : White paste |
| <b>Odor</b>                   | : Mild          | <b>Odor threshold</b>                        | : N/Av        |
| <b>pH</b>                     | : 8.0 – 8.5     | <b>Specific gravity</b>                      | : 1.02        |
| <b>Boiling point</b>          | : 212°F (100°C) | <b>Coefficient of water/oil distribution</b> | : N/Av        |
| <b>Melting/Freezing point</b> | : N/Av          | <b>Solubility in water</b>                   | : Dispersible |

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**Vapor pressure (mm Hg @ 20°C / 68°F)** : N/Av      **Evaporation rate (n-Butyl acetate = 1)** : N/Av  
**Vapor density (Air = 1)** : N/Av      **Volatiles (% by weight)** : Approximately 46 – 50%  
**Volatile organic compounds (VOCs)** : 0.0 g/L SCAQMD 1168  
**Particle size** : N/Av      **Flammability classification** : Not flammable  
**Flash point** : >93.3°C (>200°F) **Lower flammable limit (% by vol)** : Not available  
**Flash point method** : Setflash closed **Upper flammable limit (% by vol)** : Not available  
**Auto-ignition temperature** : N/Av      **Decomposition temperature** : Not available  
**Viscosity** : 50,000 cSt      **Oxidizing properties** : Not available  
**Explosion data: Sensitivity to mechanical impact / static discharge**  
 : Not expected to be sensitive to mechanical impact or static discharge.

**SECTION 10 – REACTIVITY AND STABILITY INFORMATION**

**Reactivity** : Not reactive.  
**Stability** : Stable under the recommended storage and handling conditions prescribed.  
**Hazardous reactions** : Hazardous polymerization does not occur.  
**Conditions to avoid** : Extreme heat.  
**Materials to avoid and incompatibility**  
 : Strong oxidizing agents.  
**Hazardous decomposition products**  
 : None known, refer to hazardous combustion products in Section 5.

**SECTION 11 – TOXICOLOGICAL INFORMATION**

**Routes of exposure** : *Inhalation*: YES      *Skin Absorption*: NO      *Skin and Eyes*: Yes      *Ingestion*: YES  
**Symptoms of exposure** : See Section 4.  
**Calculated Acute Toxicity Estimates for the Product**  
*Inhalation* : > 38 mg/L  
*Oral* : > 3000 mg/kg  
*Dermal* : > 3000 mg/kg  
**Toxicological data** : See below for individual ingredient acute toxicity data.

Ingredients	LC50 (4 hr)	LD50	
	Inhalation, rat	Oral, rat	Dermal, rabbit
No hazardous ingredients.	N/Av	N/Av	N/Av

**Skin corrosion or irritation** : May cause mild irritation to skin.  
**Serious eye damage / eye irritation** : May cause mild, temporary irritation to eyes.  
**Respiratory or skin sensitization** : None known.  
**Germ cell mutagenicity** : None known.  
**Carcinogenic status** : No components are classified as carcinogenic by IARC, ACGIH, NTP, and OSHA.  
**Reproductive toxicity** : None known.  
**Specific Target Organ Toxicity, Single Exposure**  
 : None known.  
**Specific Target Organ Toxicity, Repeated Exposure**  
 : None known.  
**Aspiration hazard** : None known.  
**Additional information** : N/Av

**SECTION 12 – ECOLOGICAL INFORMATION**

- Environmental effects** : The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
- Ecotoxicity** : No data available.
- Biodegradability** : No data available.
- Bioaccumulative potential** : No data available.
- Mobility in soil** : No data available.
- PBT and vPvB assessment** : No data available.
- Other adverse effects** : No data available.

## SECTION 13 – DISPOSAL CONSIDERATION

- Handling for disposal** : Handle waste according to recommendations in Section 7.
- Methods of disposal** : You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.
- Packaging** : Handle contaminated packaging in the same manner as the product.
- RCRA** : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

## SECTION 14 – TRANSPORTATION INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	None	This product is not regulated according to Canadian TDG regulations.	None	None	None
TDG Additional Information	None				
49 CFR/DOT	None	This product is not regulated according to US DOT regulations.	None	None	None
49 CFR/DOT Additional Information	None				

## SECTION 15 – REGULATORY INFORMATION

**Canadian Information:**

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR). This SDS contains all of the information required by the HPR.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on either the Domestic Substances List (DSL) or the Non- Domestic Substances List (NDSL).

**US Federal Information:**

TSCA: All ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present in this material.

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Not Hazardous.

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SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This product is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above *de minimus* concentrations.

**U.S. State Right To Know Laws**

California Proposition 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive harm.

Other State Right to Know Laws: Not applicable.

**SECTION 16 – OTHER INFORMATION**

HMIS Rating : \* - Chronic Hazard 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe  
*Health: 1 Flammability 1 Physical Hazard: 0 PPE: Gloves, safety glasses*

**Legend** : ACGIH: American Conference of Governmental Industrial Hygienists  
CAS: Chemical Abstract Services  
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980  
CFR: Code of Federal Regulations  
DOT: Department of Transportation  
DSL: Domestic Substances List  
EPA: Environmental Protection Agency  
GHS: Globally Harmonized System  
HPR: Hazardous Products Regulations  
IARC: International Agency for Research on Cancer  
Inh: Inhalation  
N/Av: Not Available  
N/Ap: Not Applicable  
NIOSH: National Institute of Occupational Safety and Health  
NTP: National Toxicology Program  
OSHA: Occupational Safety and Health Administration  
PEL: Permissible exposure limit  
RCRA: Resource Conservation and Recovery Act  
SARA: Superfund Amendments and Reauthorization Act  
STEL: Short Term Exposure Limit  
TDG: Canadian Transportation of Dangerous Goods Act & Regulations  
TLV: Threshold Limit Values  
TSCA: Toxic Substance Control Act  
TWA: Time Weighted Average  
WHMIS: Workplace Hazardous Materials Identification System

**Disclaimer of Liability**

The Information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product. No warranty of any kind is given or implied. Armstrong World Industries, Inc. will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein.

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